RAW SEQUENCE LISTING   DATE: 07/22/2003
PATENT APPLICATION: US/09/496,231C   TIME: 08:12:52

  Input Set : **A:\PTO.AMC.txt**
  Output Set: **N:\CRF4\07222003\I496231C.raw**

```
 4 <110> APPLICANT: Hubbell, Jeffrey A.
 5         Elbert, Donald
 6         Lutolf, Matthias
 7         Pratt, Alison
 8         Schoenmakers, Ronald
 9         Tirelli, Nicola
10         Vernon, Brent
12 <120> TITLE OF INVENTION: BIOMATERIALS FORMED BY NUCLEOPHILIC
13         ADDITION REACTION TO CONJUGATED UNSATURATED GROUPS
16 <130> FILE REFERENCE: 50154/002002
18 <140> CURRENT APPLICATION NUMBER: 09/496,231C
19 <141> CURRENT FILING DATE: 2000-02-01
21 <150> PRIOR APPLICATION NUMBER: 60/118,093
22 <151> PRIOR FILING DATE: 1999-02-01
24 <160> NUMBER OF SEQ ID NOS: 74
26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 10
30 <212> TYPE: PRT
31 <213> ORGANISM: Artificial Sequence
33 <220> FEATURE:
34 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 36 <221> NAME/KEY: VARIANT
37 <222> LOCATION: (1)...(10)
38 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W--> 40 <400> 1
W--> 41 Tyr Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Tyr
42 1               5               10
43 <210> SEQ ID NO: 2
44 <211> LENGTH: 8
45 <212> TYPE: PRT
46 <213> ORGANISM: Artificial Sequence
48 <220> FEATURE:
49 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 51 <221> NAME/KEY: VARIANT
52 <222> LOCATION: (1)...(8)
53 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W--> 55 <400> 2
W--> 56 Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys
57 1               5
58 <210> SEQ ID NO: 3
59 <211> LENGTH: 6
60 <212> TYPE: PRT
```

p.6

RAW SEQUENCE LISTING   DATE: 07/22/2003
PATENT APPLICATION: US/09/496,231C   TIME: 08:12:52

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\07222003\I496231C.raw

```
        61 <213> ORGANISM: Artificial Sequence
        63 <220> FEATURE:
        64 <223> OTHER INFORMATION: Based on Homo sapiens
W-->    66 <221> NAME/KEY: VARIANT
        67 <222> LOCATION: (1)...(6)
        68 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W-->    70 <400> 3
W-->    71 Xaa Xaa Xaa Xaa Xaa Xaa
        72 1                     5
        73 <210> SEQ ID NO: 4
        74 <211> LENGTH: 13
        75 <212> TYPE: PRT
        76 <213> ORGANISM: Artificial Sequence
        78 <220> FEATURE:
        79 <223> OTHER INFORMATION: Based on Homo sapiens
W-->    81 <221> NAME/KEY: VARIANT
        82 <222> LOCATION: (1)...(13)
        83 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W-->    85 <400> 4
W-->    86 Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys
        87 1                     5                      10
        88 <210> SEQ ID NO: 5
        89 <211> LENGTH: 7
        90 <212> TYPE: PRT
        91 <213> ORGANISM: Artificial Sequence
        93 <220> FEATURE:
        94 <223> OTHER INFORMATION: Based on Homo sapiens
W-->    96 <221> NAME/KEY: VARIANT
        97 <222> LOCATION: (1)...(7)
        98 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W-->   100 <400> 5
W-->   101 Cys Xaa Xaa Xaa Xaa Xaa Cys
       102 1                     5
       103 <210> SEQ ID NO: 6
       104 <211> LENGTH: 13
       105 <212> TYPE: PRT
       106 <213> ORGANISM: Artificial Sequence
       108 <220> FEATURE:
       109 <223> OTHER INFORMATION: Based on Homo sapiens
W-->   111 <221> NAME/KEY: VARIANT
       112 <222> LOCATION: (2)...(6)
       113 <223> OTHER INFORMATION: Xaa=any amino acid except Cys or Tyr
W-->   115 <221> VARIANT
       116 <222> LOCATION: (8)...(12)
       117 <223> OTHER INFORMATION: Xaa=any amino acid except Cys or Tyr
W-->   119 <221> MOD_RES
       120 <222> LOCATION: 1
       121 <223> OTHER INFORMATION: Xaa=acetylated Tyrosine
W-->   123 <400> 6
```

RAW SEQUENCE LISTING   DATE: 07/22/2003
PATENT APPLICATION: US/09/496,231C   TIME: 08:12:52

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\07222003\I496231C.raw

```
W--> 124 Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa Tyr
     125 1               5                   10
     128 <210> SEQ ID NO: 7
     129 <211> LENGTH: 5
     130 <212> TYPE: PRT
     131 <213> ORGANISM: Artificial Sequence  .
     133 <220> FEATURE:
     134 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 136 <221> NAME/KEY: VARIANT
     137 <222> LOCATION: (1)...(5)
     138 <223> OTHER INFORMATION: Xaa=any amino acid except Cys or Tyr
W--> 140 <400> 7
W--> 141 Xaa Xaa Xaa Xaa Xaa
     142 1          5
     143 <210> SEQ ID NO: 8
     144 <211> LENGTH: 6
     145 <212> TYPE: PRT
     146 <213> ORGANISM: Artificial Sequence
     148 <220> FEATURE:  .
     149 <223> OTHER INFORMATION: Based on Homo sapiens
     151 <400> SEQUENCE: 8
     152 Gly Pro Arg Val Val Glu
     153 1               5
     154 <210> SEQ ID NO: 9
     155 <211> LENGTH: 6
     156 <212> TYPE: PRT
     157 <213> ORGANISM: Artificial Sequence
     159 <220> FEATURE:
     160 <223> OTHER INFORMATION: Based on Homo sapiens
     162 <400> SEQUENCE: 9
     163 Asn Asn Arg Asp Asn Thr
     164 1               5
     165 <210> SEQ ID NO: 10
     166 <211> LENGTH: 6
     167 <212> TYPE: PRT
     168 <213> ORGANISM: Artificial Sequence
     170 <220> FEATURE:
     171 <223> OTHER INFORMATION: Based on Homo sapiens
     173 <400> SEQUENCE: 10
     174 Tyr Asn Arg Val Ser Glu
     175 1               5
     176 <210> SEQ ID NO: 11  .
     177 <211> LENGTH: 6
     178 <212> TYPE: PRT
     179 <213> ORGANISM: Artificial Sequence
     181 <220> FEATURE:
     182 <223> OTHER INFORMATION: Based on Homo sapiens
     184 <400> SEQUENCE: 11
     185 Gln Met Arg Met Glu Leu
```

RAW SEQUENCE LISTING   DATE: 07/22/2003
PATENT APPLICATION: US/09/496,231C   TIME: 08:12:52

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\07222003\I496231C.raw

```
186  1                  5
187 <210> SEQ ID NO: 12
188 <211> LENGTH: 6
189 <212> TYPE: PRT
190 <213> ORGANISM: Artificial Sequence
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Based on Homo sapiens
195 <400> SEQUENCE: 12
196 Gly Phe Arg His Arg His
197  1                  5
198 <210> SEQ ID NO: 13
199 <211> LENGTH: 6
200 <212> TYPE: PRT
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Based on Homo sapiens
206 <400> SEQUENCE: 13
207 Gly Tyr Arg Ala Arg Pro
208 ·1                  5
209 <210> SEQ ID NO: 14
210 <211> LENGTH: 6
211 <212> TYPE: PRT
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Based on Homo sapiens
217 <400> SEQUENCE: 14
218 Tyr Gln Lys Asn Asn Lys
219  1                  5
220 <210> SEQ ID NO: 15
221 <211> LENGTH: 6
222 <212> TYPE: PRT
223 <213> ORGANISM: Artificial Sequence
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Based on Homo sapiens
228 <400> SEQUENCE: 15
229 Leu Ile Lys Met Lys Pro
230  1                  5
231 <210> SEQ ID NO: 16
232 <211> LENGTH: 6
233 <212> TYPE: PRT
234 <213> ORGANISM: Artificial Sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: Based on Homo sapiens
239 <400> SEQUENCE: 16
240 Asn Phe Lys Ser Gln Leu
241  1                  5
242 <210> SEQ ID NO: 17
243 <211> LENGTH: 6
244 <212> TYPE: PRT
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/496,231C

DATE: 07/22/2003
TIME: 08:12:52

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\07222003\I496231C.raw**

```
245 <213> ORGANISM: Artificial Sequence
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Based on Homo sapiens
250 <400> SEQUENCE: 17
251 Glu Trp Lys Ala Leu Thr
252  1               5
253 <210> SEQ ID NO: 18
254 <211> LENGTH: 6
255 <212> TYPE: PRT
256 <213> ORGANISM: Artificial Sequence
258 <220> FEATURE:
259 <223> OTHER INFORMATION: Based on Homo sapiens
261 <400> SEQUENCE: 18
262 Ser Tyr Lys Met Ala Asp
263  1               5
264 <210> SEQ ID NO: 19
265 <211> LENGTH: 6
266 <212> TYPE: PRT
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Based on Homo sapiens
272 <400> SEQUENCE: 19
273 Thr Gln Lys Lys Val Glu
274  1               5
275 <210> SEQ ID NO: 20
276 <211> LENGTH: 6
277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Based on Homo sapiens
283 <400> SEQUENCE: 20
284 Arg Gln Lys Gln Val Lys
285  1               5
286 <210> SEQ ID NO: 21
287 <211> LENGTH: 6
288 <212> TYPE: PRT
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: Based on Homo sapiens
294 <400> SEQUENCE: 21
295 Gln Val Lys Asp Asn Glu
296  1               5
299 <210> SEQ ID NO: 22
300 <211> LENGTH: 6
301 <212> TYPE: PRT
302 <213> ORGANISM: Artificial Sequence
304 <220> FEATURE:
305 <223> OTHER INFORMATION: Based on Homo sapiens
307 <400> SEQUENCE: 22
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 07/22/2003
PATENT APPLICATION: US/09/496,231C   TIME: 08:12:53·

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\07222003\I496231C.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 3,4,5,6,7,8
Seq#:2; Xaa Pos. 2,3,4,5,6,7
Seq#:3; Xaa Pos. 1,2,3,4,5,6
Seq#:4; Xaa Pos. 2,3,4,5,6,8,9,10,11,12
Seq#:5; Xaa Pos. 2,3,4,5,6
Seq#:6; Xaa Pos. 1,2,3,4,5,6,8,9,10,11,12
Seq#:7; Xaa Pos. 1,2,3,4,5
Seq#:49; Xaa Pos. 3
Seq#:50; Xaa Pos. 1,2,3,4,5,6
Seq#:55; Xaa Pos. 2
Seq#:62; Xaa Pos. 1,10
Seq#:66; Xaa Pos. 4,6
Seq#:71; Xaa Pos. 5
Seq#:72; Xaa Pos. 1,2,3,4,5

VERIFICATION SUMMARY　　　　　　　　　DATE: 07/22/2003
PATENT APPLICATION: **US/09/496,231C**　　　TIME: 08:12:53

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\07222003\I496231C.raw**

```
L:36 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:40 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:41 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:51 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:55 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:56 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:66 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:70 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:71 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:81 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:85 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:96 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:100 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:5
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:111 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:115 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6
L:119 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6
L:123 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:136 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:140 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7
L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:590 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:594 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:49
L:595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:605 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:609 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:50
L:613 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:50
L:614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:674 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:678 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:55
L:679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0
L:757 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:762 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:62
L:763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0
L:808 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:813 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:66
L:814 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0
L:897 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:901 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:71
L:902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0
L:916 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:923 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:72
L:924 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0
```